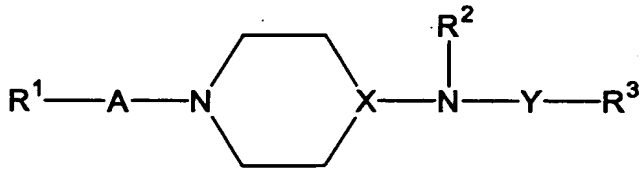
Claims

1. A neurotrophic factor production accelerator comprising, as an active ingredient, a compound represented by the following formula (I):

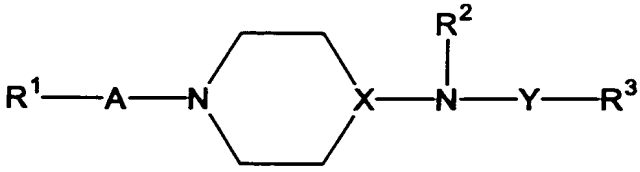


(I)

wherein R^1 is lower alkyl, aryl, ar(lower)alkoxy or a heterocyclic group, the above groups being optionally substituted by halogen, R^2 is a hydrogen atom or lower alkyl, R^3 is cyclo(lower)alkyl, aryl or ar(lower)alkyl, the above groups being optionally substituted by halogen, A is -CO-, $-SO_2-$ or lower alkylene, X is N or CH, and Y is -CO-, $-SO_2-$ or -CONH-, a salt thereof, a prodrug thereof or a solvate thereof.

2. The accelerator of claim 1, wherein the compound represented by the formula (I) is N-(4-acetyl-1-piperazinyl)-p-fluorobenzamide monohydrate.

3. A method for accelerating neurotrophic factor production, which comprises administering, to a mammal, a compound represented by the following formula (I):

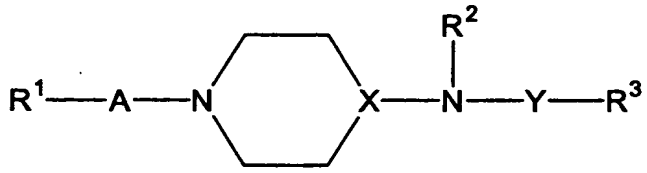


(I)

wherein R^1 is lower alkyl, aryl, ar(lower)alkoxy or a heterocyclic group, the above groups being optionally substituted by halogen, R^2 is a hydrogen atom or lower alkyl, R^3 is cyclo(lower)alkyl, aryl or ar(lower)alkyl, the above groups being optionally substituted by halogen, A is -CO-, $-SO_2-$ or lower alkylene, X is N or CH, and Y is -CO-, $-SO_2-$ or -CONH-, a salt thereof, a prodrug thereof or a solvate thereof.

4. The method of claim 3, wherein the compound represented by the formula (I) is N-(4-acetyl-1-piperazinyl)-p-fluorobenzamide monohydrate.

5. Use of a compound represented by the following formula (I):

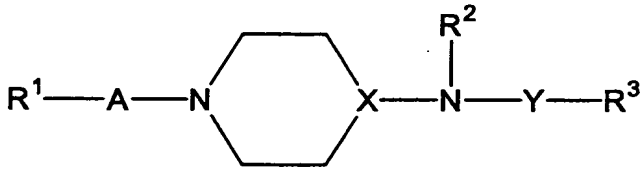


(I)

wherein R^1 is lower alkyl, aryl, ar(lower)alkoxy, or a heterocyclic group, the above groups being optionally substituted by halogen, R^2 is a hydrogen atom or lower alkyl, R^3 is cyclo(lower)alkyl, aryl or ar(lower)alkyl, the above groups being optionally substituted by halogen, A is -CO-, $-SO_2-$ or lower alkylene, X is N or CH, and Y is -CO-, $-SO_2-$ or -CONH-, a salt thereof, a prodrug thereof or a solvate thereof, for the production of a neurotrophic factor production accelerator.

6. The use of claim 5, wherein the compound represented by the formula (I) is N-(4-acetyl-1-piperazinyl)-p-fluorobenzamide monohydrate.

7. A pharmaceutical composition for accelerating neurotrophic factor production, which comprises a compound represented by the following formula (I):



(I)

wherein R^1 is lower alkyl, aryl, ar(lower)alkoxy, or a heterocyclic group, the above groups being optionally substituted by halogen, R^2 is a hydrogen atom or lower alkyl, R^3 is cyclo(lower)alkyl, aryl or ar(lower)alkyl, the above groups being

optionally substituted by halogen, A is -CO-, -SO_2- or lower alkylene, X is N or CH, and Y is -CO-, -SO_2- or -CONH-, a salt thereof, a prodrug thereof or a solvate thereof, and a pharmaceutically acceptable carrier.

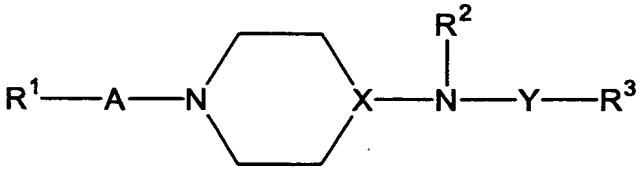
8. The pharmaceutical composition of claim 7, wherein the compound represented by the formula (I) is N-(4-acetyl-1-piperazinyl)-p-fluorobenzamide monohydrate.

9. A commercial package comprising the pharmaceutical composition of claim 7 or 8, and a written matter associated therewith, the written matter stating that the pharmaceutical composition can or should be used for accelerating neurotrophic factor production.

10. An agent for the prophylaxis or treatment of a motor nervous system or peripheral nervous system disease, which comprises, as an active ingredient, a compound having a neurotrophic factor production accelerating activity.

11. The agent of claim 10, wherein the motor nervous system or peripheral nervous system disease is selected from the group consisting of a peripheral nerve disorder (neuropathy, diabetic nervous disease), myelopathy, multiple sclerosis, amyotrophic lateral sclerosis (ALS), Guillain-Barre' syndrome, Huntington's chorea and neuropathic pain.

12. The agent of claim 10 or 11, wherein the compound having a neurotrophic factor production accelerating activity is a compound represented by the following formula (I):



(I)

wherein R^1 is lower alkyl, aryl, ar(lower)alkoxy, or a

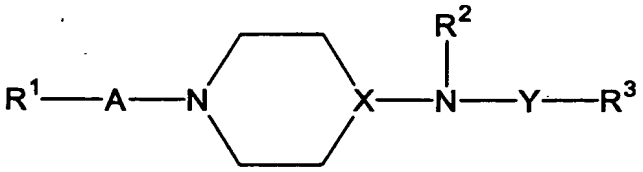
heterocyclic group, the above groups being optionally substituted by halogen, R^2 is a hydrogen atom or lower alkyl, R^3 is cyclo(lower)alkyl, aryl or ar(lower)alkyl, the above groups being optionally substituted by halogen, A is -CO-, $-SO_2-$ or lower alkylene, X is N or CH, and Y is -CO-, $-SO_2-$ or -CONH-, a salt thereof, a prodrug thereof or a solvate thereof.

13. The agent of claim 12, wherein the compound represented by the formula (I) is N-(4-acetyl-1-piperaznyl)-p-fluorobenzamide monohydrate.

14. A method of preventing or treating a motor nervous system or peripheral nervous system disease, which comprises administering a compound having a neurotrophic factor production accelerating activity to a mammal.

15. The method of claim 14, wherein the motor nervous system or peripheral nervous system disease is selected from the group consisting of a peripheral nerve disorder (neuropathy, diabetic nervous disease), myelopathy, multiple sclerosis, amyotrophic lateral sclerosis (ALS), Guillain-Barre' syndrome, Huntington's chorea and neuropathic pain.

16. The method of claim 14 or 15, wherein the compound having a neurotrophic factor production accelerating activity is a compound represented by the following formula (I):



(I)

wherein R^1 is lower alkyl, aryl, ar(lower)alkoxy, or a heterocyclic group, the above groups being optionally substituted by halogen, R^2 is a hydrogen atom or lower alkyl, R^3 is cyclo(lower)alkyl, aryl or ar(lower)alkyl, the above groups being

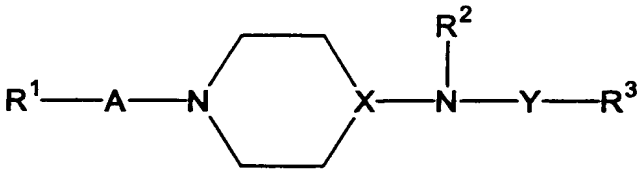
optionally substituted by halogen, A is -CO-, -SO_2- or lower alkylene, X is N or CH, and Y is -CO-, -SO_2- or -CONH-, a salt thereof, a prodrug thereof or a solvate thereof.

17. The method of claim 16, wherein the compound represented by the formula (I) is N-(4-acetyl-1-piperazinyl)-p-fluorobenzamide monohydrate.

18. Use of a compound having a neurotrophic factor production accelerating activity for the production of an agent for the prophylaxis or treatment of a motor nervous system or peripheral nervous system disease.

19. The use of claim 18, wherein the motor nervous system or peripheral nervous system disease is selected from the group consisting of a peripheral nerve disorder (neuropathy, diabetic nervous disease), myelopathy, multiple sclerosis, amyotrophic lateral sclerosis (ALS), Guillain-Barre' syndrome, Huntington's chorea and neuropathic pain.

20. The use of claim 18 or 19, wherein the compound having a neurotrophic factor production accelerating activity is a compound represented by the following formula (I):



(I)

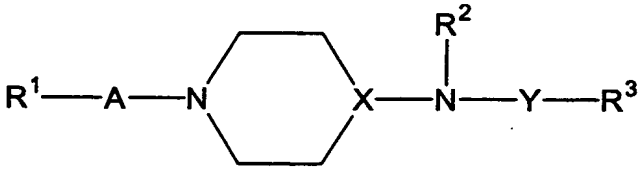
wherein R^1 is lower alkyl, aryl, ar(lower)alkoxy, or a heterocyclic group, the above groups being optionally substituted by halogen, R^2 is a hydrogen atom or lower alkyl, R^3 is cyclo(lower)alkyl, aryl or ar(lower)alkyl, the above groups being optionally substituted by halogen, A is -CO-, -SO_2- or lower alkylene, X is N or CH, and Y is -CO-, -SO_2- or -CONH-, a salt thereof, a prodrug thereof or a solvate thereof.

21. The use of claim 20, wherein the compound represented by the formula (I) is N-(4-acetyl-1-piperazinyl)-p-fluorobenzamide monohydrate.

22. A pharmaceutical composition for the prophylaxis or treatment of a motor nervous system or peripheral nervous system disease, which comprises a compound having a neurotrophic factor production accelerating activity and a pharmaceutically acceptable carrier.

23. The pharmaceutical composition of claim 22, wherein the motor nervous system or peripheral nervous system disease is selected from the group consisting of a peripheral nerve disorder (neuropathy, diabetic nervous disease), myelopathy, multiple sclerosis, amyotrophic lateral sclerosis (ALS), Guillain-Barre' syndrome, Huntington's chorea and neuropathic pain.

24. The pharmaceutical composition of claim 22 or 23, wherein the compound having a neurotrophic factor production accelerating activity is a compound represented by the following formula (I):



(I)

wherein R^1 is lower alkyl, aryl, ar(lower)alkoxy, or a heterocyclic group, the above groups being optionally substituted by halogen, R^2 is a hydrogen atom or lower alkyl, R^3 is cyclo(lower)alkyl, aryl or ar(lower)alkyl, the above groups being optionally substituted by halogen, A is -CO-, $-SO_2-$ or lower alkylene, X is N or CH, and Y is -CO-, $-SO_2-$ or -CONH-, a salt thereof, a prodrug thereof or a solvate thereof.

25. The pharmaceutical composition of claim 24, wherein the

compound represented by the formula (I) is N-(4-acetyl-1-piperazinyl)-p-fluorobenzamide monohydrate.

26. A commercial package comprising the pharmaceutical composition of any of claims 22 to 25, and a written matter associated therewith, the written matter stating that the pharmaceutical composition can or should be used for the prophylaxis or treatment of a motor nervous system or peripheral nervous system disease.